Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20054

In the Matter of

Technological Transition of the Nationôs Communications Infrastructure	))))	GN Docket No. 12-353
United States Telecom Association Petition For Declaratory Ruling that Incumbent Local Exchange Carriers Are Non-dominant In the Provision of Switched Access Services	)))))))	WC Docket No. 13-3

COMMENTS OF INTERNET INNOVATION ALLIANCE

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The Internet Innovation Alliance[1] (ñIIAò or ñweò) appreciates the opportunity to submit this pleading as both Reply Comments to AT&Tôs Internet Protocol (ñIPò) Transition Petition[2] (ñAT&T Petitionò) in GN Docket No. 12-353 and Comments in the United States Telecom Associationôs (ñUSTAò) Non-dominance Petition[3] (ñUSTA Petitionò) in WC Docket No. 13-3.

IIA remains convinced that authorizing a small number of geographically limited trials as proposed in AT&Tôs Petition would aid the Federal Communications Commission (ñFCCò or ñCommissionò) in addressing the complex policy and technical issues that may arise during the

[1] The Internet Innovation Alliance is a broad-based coalition of business and non-profit organizations that aims to ensure every American, regardless of race, income or geography, has access to the critical tool that is broadband Internet. The IIA seeks to promote public policies that support equal opportunity for universal broadband availability and adoption so that everyone, everywhere can seize the benefits of the Internet - from education to health care, employment to community building, civic engagement and beyond. *Available at* http://www.internetinnovation.org/.

[2] Petition to Launch a Proceeding Concerning the TDM-to-IP Transition, GN Docket No. 12-353, (Nov. 7, 2012). *Available at* http://apps.fcc.gov/ecfs/document/view?id=7022086087. (ñ*AT&T Petition*ò).

[3] Petition of USTelecom for Declaratory Ruling that Incumbent Local Exchange Carriers Are Non-Dominant in the Provision of Switched Access Services, WC Docket No. 13-3, (Dec. 19, 2012). A*vailable at* http://apps.fcc.gov/ecfs/comment/view?id=6017157073. (ñ*USTA Petition*ò).

IP Transition.[4] The limited geographic tests advanced by AT&T provide a framework for the FCC to help transition Americaôs communications infrastructure to all IP-based networks. This approach represents good public policy, promotes sound economics and is an appropriate first step toward more robust and ubiquitous broadband across America.

IIA also believes sufficient data exists to support the finding that independent local exchange carriers (ñILECsò) no longer exercise market power in the local voice market, given their loss of market share and the significant number of alternative providers available for voice services. Thus, the FCC should declare ILECs non-dominant in the local exchange market.

We support both Petitions as helpful actions to speed the IP Transition, as well as expand our economy, create jobs and transform our nationôs communications networks so they are better able to provide more dynamic and versatile service offerings for both businesses and consumers.

THE PROPOSAL TO CONDUCT BETA TRIALS EPITOMIZES THE BEST OF GOOD GOVERNMENT

Some parties suggested that open, public, transparent trials involving all interested stakeholders would be inappropriate and/or simply a waste of time.[5] We maintain that AT&Tôs proposed limited trial epitomizes sound policy-making, is good government and provides a prudent mechanism by which the FCC can further the IP transition.

AT&Tôs request to initiate a dialogue with the FCC and to begin to collaborate with all interested stakeholders, including other ILECs who wish to initiate their own beta test process,

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[4] Comment Sought on the Technological Transition of the Nationôs Communications Infrastructure, Docket No. GN 12-353, (ñ*Comment Sought*ò), Comments of the Internet Innovation Alliance (January 25, 2013). A*vailable at* http://apps.fcc.gov/ecfs/document/view?id=7022112265.

[5] *AT&T Petition*, Comments of Cbeyond at 20; Comments of Massachusetts Department of Telecom and Cable at 9; and Comments of Sprint at 6-8, asserting that AT&Tôs proposed test trials and the transition in technology are unlikely to produce any useful data concerning the need for consumer protection regulations and consumer welfare benefits; the Commission should not give high priority in any technology transition proceeding to the issues raised in AT&Tôs Petition.

provides an appropriate framework for the Commission to examine which regulations, if any, are appropriate for 21st century technologies. AT&T suggests that the FCC use the regulatory tools at its disposal to scrutinize the results of the tests and then, in a fact-based, open and transparent proceeding, modify, streamline and/or eliminate regulations that impede the transition thereby facilitating the transition and the subsequent retirement of outdated legacy facilities.

Other commenters have noted that beta trials are commonly used by the private sector to test for issues before the introduction of new products and services.[6] In advance of the nationwide digital television (ñDTVò) over-the-air television broadcasting transition,[7] the FCC sponsored a market beta trial in Wilmington, North Carolina.[8] The DTV trial provided the FCC with an opportunity to engage stakeholders, including consumer groups, on the issues associated with the roll-out of a new technology. Geographically limited trials provide a controlled setting in which to explore potential problems that could arise during a broader nationwide deployment of new IP-based networks and infrastructure. Service providers, consumers, other interested parties and regulators would be able to monitor the beta trial and its effects on all involved to ensure the most effective means for maintaining essential objectives such as universal, affordable service, 9-1-1 access and disability access. The knowledge gained from the IP trials would equip the Commission to address any problems that arise and confidently proceed to sunset the antiquated traditional telephone network in favor of the robust and more functional all-IP network.

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[6] *Comment Sought*, Comments of TechAmerica at 2.
[7] *See* http://www.dtv.gov/. (Last accessed February 22, 2013).
[8] News Release, *Vast Majority of Wilmington, NC, Residents Were Aware of the Early Digital Television Transition in Their Viewing Area*, Federal Communications Commission (September 10, 2008). *Available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-285330A1.pdf. (Last accessed February 21, 2013).

Other commenters oppose the trials because they deem it possible that certain existing regulations could be eliminated in order to effectuate the beta trial.[9] That concern, however, is premature since any rules that might be potentially impacted during the IP transition trials would not be readily apparent until the ILEC files detailed plans with the FCC to commence the trial.

The commenters fail to make a compelling argument on why the FCC should not move forward with the beta trials. The consumer benefits associated with the IP transition far outweigh any potential costs identified by opponents. The FCC should quickly approve the beta-trials and start the process to ensure that market forces, not regulation, govern the nationôs transition to all-IP networks and services.

POLICY MAKERS SHOULD ADDRESS THE MARKET THAT IS, NOT THE MYTH THAT WAS

In considering AT&Tôs petition, the Commission must recognize that several parties opposing the AT&T proposal cling to a 1990s conception of the state of todayôs communications marketplace: one in which a dominant service provider for voice service still exists and consumers have few alternative service offerings available.[10] They fail to acknowledge the changes in technology and market competition that have resulted from the ñpro-competitive, deregulatoryò framework set in motion by the 1996 Telecommunications Act[11] (ñ1996 Actò) and/or the impact it has had on the voice communications market. Today, consumers and

[9] *Comment Sought*, Comments of AARP at 10; Comments of Free Press at 28; Comments of NASUCA at 2, 22-26; Comments of National Consumer Law Center at 3; Comments of Rural Broadband Policy Group at 9, 11.

[10] *Comment Sought*, Comments of Ad Hoc ñThe duopoly nature of these markets means that they are not sufficiently competitive to warrant the de-regulation AT&T seeks. Duopolies are not significantly more effective at constraining market power than is a monopoly,ò at 13, *see also* 8-12; Comments of Bandwidth.com at 6; Comments of Cablevision at 4-5; Comments of Competitive Carriers Association at 10; Comments of Granite Telecom at 19-22; Comments of Hypercube at 8; Comments of MetroPCS at 6-8; Comments of Peerless, ñAT&T would have the ability to aggregate market power over the termination of services to extract unreasonable terms and conditions from Sending Carriers seeking to exchange IP traffic with AT&T and its affiliates,ò at 13, *see also* 10, 14; Sprint, ñAT&T Possesses Market Power in the Provision of Voice Services ï and It is Abusing That Power to Inhibit the Transition to an All-IP World,ò at 12, *see also* 13-14; TelePacific at 2, 6; XO at 4-6, 25-30.

[11] Telecommunications Act of 1996, Pub. LA. No. 104-104, 110 Stat. 56 (1996). (ñ*The Act*ò).

businesses look beyond traditional voice networks in search of enhanced functionalities ï including voice ï provided by a range of alternative competitive broadband service providers.[12]

No commenter in this proceeding demonstrates that ILECs have market power and are dominant in the voice services market. To the contrary, several parties highlight ILEC loss of market share and the existence of various alternative service providers as indicia of a competitive market for voice service and the inability of ILECs to exercise market power.[13] In significant portions of the nation, it appears that ILECs today serve less than one-third of consumers with switched access voice service in their service areas (e.g., only 25% of households in AT&Tôs 22-state-wireline footprint subscribe to traditional ILEC voice service).[14] Households that remain connected to legacy wireline service are now outnumbered by those who have chosen to ñcut the cordò and rely exclusively on mobile service (35.8%).[15]

The availability of alternatives in the broadband market has brought consumers expanded choice in technology, service platforms, and providers, forever altering the way in which we communicate. According to the Federal Communications Commissionôs (ñFCCò) National Broadband Map, 89% of Americans have a choice of five or more broadband providers, including wireless and satellite. 85% have a choice of two or more wire line broadband

[12] *Comment Sought*, Comments of Verizon and Verizon Wireless at 1-2, 5-20: lists many alternative forms of consumer communication including VoIP from broadband providers and companies such as Vonage, mobile 4G LTE, satellite service, Skype, social media platforms, and SMS/text messages, among others.
[13] *Comment Sought*, Comments of The National Cable & Telecommunications Association at 4, 6; Comments of Verizon at 1-2, 5-20; Comments of CenturyLink at 2,4, 6-7; Comments of Cox at 2, 7 ñé in an environment where customers can choose their carriers freelyé ò; Comments of ITTA at 8, 10.
[14] *AT&T Petition*, AT&T Comments at Appendix A.
[15] Blumberg, Stephen, J. Ph.D., Luke, Julian V., *Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, January – June 2012*, Centers for Disease Control, (Rel. 12/2012). (Last accessed Feb. 19, 2013).

providers. 86.7% of Americans have a choice of four or more wireless broadband providers, while more than half have access to five or more wireless broadband providers.[16]

For nearly two decades, the broadband market has seen expanded investment, deployment, growth and innovation in areas where providers and/or services have not been subject to legacy regulation. For example, in the broadband market, cable-based broadband providers have traditionally led in investment and consumer adoption due in large part to the fact that they are classified as ñnew entrantsò in the broadband market and thus are not subject to the Title II legacy regulations imposed on ILECs. Similarly, in 2003 when the FCC exercised its forbearance authority to free ILEC fiber-based loops and packet-switching capabilities of hybrid loops from the unbundling requirements of Title II, investment in next-generation fiber-based networks increased significantly and was constrained only by the existing mandate on ILECs to maintain their redundant legacy TDM-based networks.[17] Moreover, wireless investment and deployment of high-speed mobile broadband serviceð neither of which is subject to legacy telephone regulationð are growing rapidly and bringing new consumers into the broadband age even faster than wireline or cable.[18]

Failing to acknowledge the economic growth and success that resulted from ñlight touchò regulation of the broadband market, certain commenters now seek to revisit the FCCôs previous forbearance decisions by looking for ways to bring ñold rules to all wires.ò Such an approach could jeopardize the hyper-competitive environment that has fostered continued innovation

[16] Bennett, Richard, Stewart, Luke and Atkinson, Robert D., *The Whole Picture: Where America's Broadband Really Stands*, at 20 (February 2013). *Available at* http://www2.itif.org/2013-whole-picture-america-broadband-networks.pdf (Last accessed February 21, 2013), citing data from NTIA ñNational Broadband Mapò, (NBM analyze table). http://www.broadbandmap.gov/data-download.. (Last accessed February 22, 2013).

[17] *See generally*, *Enterprise Forbearance Order*, 22 FCC Rcd at 18710, ¶ 8 (Citing Report & Order on Remand, *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers et al*., 18 FCC Rcd 16978, ¶¶ 272-295, 541 (2003), *aff'd in relevant part*, *United States Telecom Ass'n v. FCC*, 359, F.3d 554, 580-585 (D.C. Circ. 2004).

[18] CTIA: The Wireless Association, *Wireless Quick Facts*, available at http://www.ctia.org/advocacy/research/index.cfm/aid/10323. (Last Accessed February 22, 2013).

among broadband service and applications providers, resulting in an array of social and economic benefits for American business and consumers.

To continue these successes the Commission should ignore the call of entities seeking to expand legacy regulations in an all-IP world. Instead the Commission should make clear that the broadband market is highly competitive, acknowledge the lack of ILEC market power in the voice market and move forward with policies ï such as approving AT&Tôs trial test ï that will continue to provide for a minimally-regulated IP marketplace.

FEAR OF THE FUTURE IS NOT A SOUND BASIS FOR PUBLIC POLICY

Seventeen years ago, Congress enacted the 1996 Telecom Act, taking admirable steps to introduce facilities-based competition into the local residential and business telephone market. To jump start entry into this market, Congress allowed Competitive Local Exchange Carriers (CLECs) to ñshareò the TDM-based networks of the then ñdominantò ILECs to reach end-user consumers and businesses. Under this method of entry, the FCC mandated that piece parts of the ILEC network ï i.e., unbundled network elements ï be made available to competitors at deeply discounted rates based on regulated ñTELRICò pricing.[19]

Mandatory federal and state price-regulated access was seen at the time as the best way to promote facilities-based competition: it allowed CLECs to rapidly acquire customers and build sufficient revenue so that competitors would ultimately build-out their own modern and more efficient network infrastructure to serve newly acquired and existing customers.

Nearly two decades later, it is now self-evident that this vision for competition did not turn out as planned. Many of the CLEC commenters in this proceeding predominantly serve the

[19] *See* 47 U.S.C. §252(d).

highly profitable enterprise market.[20] Residential consumers, on the other hand, have failed to benefit from CLEC competitive service offerings made available by the regulatory unbundling requirements of the 1996 Act. In addition, seventeen years after the 1996 Act, CLECs continue to free ride on the antiquated legacy networks of their ILEC competitors.

The 1996 Actôs interconnection and unbundling requirements governing ILEC legacy TDM-based networks were designed to allow a nascent industry a chance to access customers through the then existing ILEC network. However, these requirements were not designed to permanently lock in antiquated technologies and services. In these difficult economic times, as policy makers seek to establish a regulatory framework that creates incentives for the modernization of the nationôs infrastructure through investment, it is appropriate that we ask the CLECs to stand on their own. If the nation seeks to advance innovation and universal access to high-speed broadband networks then ILECs should not be saddled with maintaining antiquated and outmoded TDM-based networks as a result of outmoded regulations or for the sole purpose of protecting the business model of specific companies.

At a minimum, given that the IP transition is ñ*the* infrastructure challenge of the 21st century,ò[21] the Commission should discount the comments from those who fear the impact of the IP transition on their own legacy businesses, especially those companies predicated on regulatory arbitrage.

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[20] *Comments Sought*, Comments of Cbeyond at 9; Comments of COMPTEL at 16-17; Comments of Granite Telecom at 6, 22-25; Comments of Hypercube at 19; Comments of TelePacific at 6; Comments of TEXALTEL at 7; Comments of XO at 6, 25-29: Commenters note their model of primarily serving business customers.

[21] FCC, *Connecting America: The National Broadband Plan,* at 3 *(2010)("National Broadband Plan"), Federal Communications Commission at* http://www.broadband.gov/plan/executive-summary/. (emphasis added).

The Commission should also disregard comments made by those who oppose AT&Tôs proposed plan solely on the basis that it is new, different and uncertain.[22] These parties argue that the IP transition would cause consumer disruption, because it will provide service in a manner that differs from the way consumers currently receive service. They contend that consumers must not be ñforced to migrateò to new services if they prefer the status quo.[23] The IP transition, however, is not about change just for changeôs sake. The broadband ecosystem constantly updates and upgrades its infrastructure, devices, and methods of delivery to provide consumers and business with cutting edge services and applications. These providers regularly upgrade equipment without incident, as the cable industry demonstrated with its own migration from TDM-based networks to IP-based networks and IP-enabled voice services.[24]

Policy makers seeking to encourage further investment and deployment of new technologies throughout the nation should understand that the ability of businesses to invest is

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[22] *Comment Sought*, Comments of Cbeyond at 20; Comments of Indiana RIC at 2-3; Comments of Massachusetts Department of Telecom and Cable at 9; Comments of NASUCA at 9; Comments of Sprint at 6-8.

[23] *Comment Sought*, Comments of AARP at 2 (ñé rather, older Americans prefer to buy both wireless mobility and wireline servicesò and ñé lead to the reasonable conclusion that older Americans have also expressed their preference for reliable, affordable, and high quality voice services.ò); at 6 (ñAT&Tôs investments are projected to extend high-quality IP-based broadband services to 99 percent of all customer locations within AT&Tôs wireline service area.ò); at 11-12 (ñAlternatively, as it will be discussed below, given that it is the apparent plan of both AT&T and Verizon to migrate a significant number of customers to LTE-based alternativesé ò and ñAs discussed above, AT&T has made similar announcements, with the implication being that for as much as 25% of AT&Tôs service area, consumers may face a wireless-only option.ò); at 12 (ñé large numbers of consumers, where they have the choice, prefer to buy both wireless and wireline voice services.ò); at 16 (ñAT&Tôs approach to technology mitigation suggests that consumers may be forced to inferior or more costly alternatives.ò); at 17 (ñThis indicates that approximately 73 percent of all households in non-metropolitan areas continue to rely on wireline voice services, and given the more limited reach of cable voice services outside of metropolitan areas, a substantial portion of these wireline voice services are provided by ILECs.ò); at 17 (ñAT&T also proposes that the Commission should support a forced migration away from TDM services in the trial wire centersò); at 18 (ñAARP is deeply concerned regarding the impact on consumers of a forced migration from legacy TDM-based voice technologies to alternatives that do not deliver comparable quality, reliability, and affordabilityò). *See also*, Rural Broadband Policy Group at 5-6 (ñThese trial runs are a forced migration to a technology that is more expensive, unreliable, and often unavailable. Some may have the option of switching to a wireless service; however, such services are more expensive and are unavailable in many rural areas); at 10 (ñIt is common knowledge that wireless networks, like the ones that AT&T would use as ñalternativesò to fixed networks, are currently fickle and unreliable, particularly in rural areas.ò)

[24] *Comment Sought*, Comments of Cablevision at 2-3; Comments of Comcast at 2; Comments of Cox at 2-3; Comments of National Cable & Telecommunications Association at 2, 4-5.

not unlimited. Requiring sustained investment in redundant, TDM-based copper networks to preserve the status quo for a shrinking base of consumers inappropriately redirects investment capital away from the networks that serve a growing majority of consumers. Dollars spent on old copper networks that consumers are abandoning are dollars siphoned away[25] from the deployment of newer IP networks that customers prefer and that add to the nationôs economic efficiency and communications capabilities.

Commenters resisting the IP-transition and advocating for continued TDM-based network operation fail to answer certain fundamental questions. Should the Commission follow their directive, would a timetable exist to end mandatory CLEC access to antiquated TDM-based networks? Would the Commission end the requirement to operate and maintain redundant networks after nationwide subscribership levels drop to a certain point, say 20 percent subscribership? Ten percent? Five percent? One percent? Should the nation sacrifice the deployment of next-generation, high speed broadband and continue to maintain burdensome, inefficient and unsustainable dual infrastructures just to provide antiquated voice service to a small group of ñlast adopters?ò

These commenters lose sight of the fact that access to vital voice communications services will remain after the IP transition is complete. It is essential that no one be left behind and that each consumer continues to receive voice communications services comparable (in terms of reliability and affordability) to what is available in todayôs marketplace. We must maintain access to public safety services as well as network access for individuals with disabilities. The challenge that the Commission faces, and which the AT&T petition addresses, is how best to resolve outstanding policy questions that will both enable the rapid replacement of

[25] *National Broadband Plan* at 49.

the public switched telephone network with all IP networks, while preserving essential consumer services.

IP NETWORKS PRESENT ENHANCED COMMUNICATIONS CAPABILITIES AND FUNCTIONALITY IN TIMES OF NEED

Certain commenters question whether the transition to IP-enabled networks and services will hinder some consumersô ability to communicate with first responders[26] and if IP-based communications presents network reliability issues.[27] Even with numerous alternatives available in the marketplace today, consumers overwhelmingly prefer IP-based networks and the myriad of services and applications they provide.[28] As noted previously, 35.8% of consumers have transitioned completely away from any wireline service and meet their communications needs exclusively with mobile service,[29] and many of the remaining consumers have chosen IP-enabled networks or services, such as VoIP,[30] for their communication needs. AT&Tôs IP petition charts a reliable path towards meeting consumer demand and replacing outdated legacy networks with the nationwide deployment of IP-based networks and infrastructure. New IP-based network

[26] *AT&T Petition*, Comments of GCI at 3: ñIf the transition to all-IP networks halted universal service support for areas that cannot otherwise sustain serviceð or for low income consumers, schools, and health clinics that cannot otherwise afford vital communications servicesð such areas could go darkò; Comments of Free Press at 5, 12-14; Comments of National Consumer Law Center at 3; Comments of NATOA at 3; Comments of Public Knowledge at 4, 6, 10-11, 22-23, 27; Comments of Rural Broadband Policy Group at 4, 9-11.

[27] *AT&T Petition*, Comments of AARP at 19-21:ò AT&T states that ñconverged IP networks are more dynamic, versatile, resilient, and cost-efficient than legacy TDM networks, however, substantial reliability issues surround the transition to broadband. Service reliability associated with the underlying broadband networks must be addressed, and performance standards must be established prior to TDM retirement.ò); Comments of Free Press at 5; Comments of Massachusetts Department of Telecom and Cable at 4-8; Comments of NASUCA at 7-9, 18; Comments of Public Knowledge at 22-25; Comments of Rural Broadband Policy Group at 5. *See also* Comments of California Public Utility Commission at 12: ñthe FCC should resolve how, for example, any necessary regulatory changes can be effected yet still preserve consumer protection, network reliability, and affordable serviceò.

[28] *Supra,* Note 12.

[29] *Supra*, Note 15.

[30] Lasar, Matthew, ñOver 20 Million VoIP Subscribers in the United Statesò, ArsTechnica (June 28, 2010). *Available at* http://arstechnica.com/tech-policy/2010/06/over-20-million-voip-subscribers-in-the-united-states/ (Last accessed February 22, 2013). *See also*, Farivar, Cyrus, ñSkype Calls Now One-third of Global Phone Trafficò, ArsTechnica (Feb. 14, 2013). *Available at* **http://arstechnica.com/business/2013/02/skype-calls-now-equivalent-to-one-third-of-global-phone-traffic/**. (Last accessed February 22, 2013).

capabilities would help ensure that consumers communicate faster and can access a wider range and variety of services on more dynamic, vibrant IP networks.

Last centuryôs traditional networks and todayôs IP-based networks may differ in their apparent strengths and weaknesses, but IP networks have substantial capabilities and functionality to offer. The FCC has affirmed the significant benefits that IP-based broadband networks and services[31] provide during times of disasters or emergency.[32] Recently, the FCCôs Public Safety & Homeland Security Bureau (ñPSHSBò) identified specific strengths associated with IP-based networks, including resiliency, scalability, graceful development / evolution, and

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[31] FCCôs Public Safety and Homeland Security Bureau (PSHSB) Web Site: ñThe development of next generation networks (NGN) for public safety communications should encompass networks that will be broadband, Internet Protocol (IP)-based and capable of handling multimedia content including voice, data, images and video.ò *Available at* http://www.fcc.gov/help/public-safety-tech-topic-22-application-emerging-wireless-broadband-technology-public-safety-co. (Last accessed February 21, 2013). *See also* FCC Public Safety Bureauôs Report*: Impact of the June 2012 Derecho on Communications Networks and Services*: ñNG9-1-1 relies on IP-based architecture rather than the PSTN-based architecture of legacy 9-1-1 to provide an expanded array of emergency communications services that encompasses both the core functionalities of legacy 9-1-1 and additional functionalities that take advantage of the enhanced capabilities of IP-based devices and networks. While this report focuses on recommendations for improving the reliability of existing E9-1-1 systems, we note that NG 9-1-1 architecture offers certain advantages over legacy technologies, including greater redundancy and reliability, the ability to provide more useful information for first responders, wider public accessibility (including to those with disabilities), and enhanced capabilities for sharing data and resources among emergency responders**. Had these NG9-1-1 architectures and capabilities been in place in the affected areas, they likely could have significantly lessened the derecho's impact on emergency communications."** *Available at* http://www.fcc.gov/document/derecho-report-and-recommendations. (Last accessed February 21, 2013). *See also* National Broadband Plan, Chapter 16: ñNG911 also will integrate entities involved in emergency response beyond the PSAP (see Exhibit 16-E.). This will vastly improve the quality and speed of response, giving all callersð including people with disabilitiesð equal service.ò

[32] Jennifer A. Manner, Stagg Newman, Jon M. Peha, *The FCC Plan for a Public Safety Broadband Wireless Network*: ñWhile the capabilities of both commercial and military communications systems have vastly improved in recent years, the same cannot be said for the systems used by most public safety agencies in the United States. These systems generally provide traditional voice communications, but lack support for broadband, geolocation, and other valuable features that are commonplace on commercial networksé **Thus, there is great need for a nationwide interoperable and highly dependable broadband wireless network built from cutting-edge technology**. http://users.ece.cmu.edu/~peha/FCC_plan_for_public_safety.pdf. (Last accessed February 21, 2013). *See also* FCCôs Public Safety and Homeland Security Bureau (PSHSB) Web Site: ñ**The development of next generation networks (NGN) for public safety communications should encompass networks that will be broadband, Internet Protocol (IP)-based and capable of handling multimedia content including voice, data, images and video**. Further, and perhaps as important as the communications requirements, is the cost of capital investment for public safety to build a reliable and ubiquitous network. **Clearly, public safety could benefit from using the capabilities of next generation commercial cellular systems** and as a result one of the simplest approaches may be for emergency responders to adopt commercial wireless type services for their communications networks, as many agencies do today. Available at http://www.fcc.gov/help/public-safety-tech-topic-22-application-emerging-wireless-broadband-technology-public-safety-co. (Last accessed February 21, 2013).

flexibility. PSHSB noted that the built-in versatility, reliability and alternative routing capabilities of the Internet create a very resilient and durable interconnection environment that serves as the basic backbone interconnection of interoperable networks. These attributes ensure that communications can be re-routed around certain areas as needed, particularly during times of emergency, thus ensuring continued interoperable connectivity for first responders and consumers.

We agree that the fundamental differences between IP-based networks and TDM-based networks raise issues related to the provision of certain functionalities, including network reliability. For example, IP-based networks are physically incapable of providing back-up power in the exact same manner offered by TDM-based copper networks; however, IP networks provide consumers with alternative options (e.g., battery back-up power is provided today on IP-based FiOS[33] and U-Verse[34] ï not generated from the central office but provided closer to the customer premises). The beta trials present an opportunity to educate the Commission and the American public on network reliability in all-IP world. Moreover, the trials provide a forum in which to discuss how a future regulatory framework, if any, would apply in a competitively neutral manner to all similarly-situated providers that offer IP-enabled voice services. On balance, however, the Commission should remember that only IP-based networks will be able to achieve rapid, high-speed advanced broadband deployment to all Americans.

CONCLUSION

[33] http://www22.verizon.com/Support/Residential/tv/fiostv/general+support/new+to+fios+tv/questionsone/121498.htm

[34] http://www.att.com/u-verse/explore/battery-backup.jsp.

For the foregoing reasons, the FCC should grant AT&Tôs Petition and immediately begin the national dialogue to commence the process to initiate the beta tests as AT&T envisions. The Commission should also review the record before it, recognize that the majority of consumers have already transitioned away from traditional phone service to the many other alternative choices for communications needs, make the proper determination that ILECs no longer possess market power, and declare that ILECS are no longer dominant providers.

Respectfully Submitted,

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